REMARKS

In response to the Office Action dated April 8, 2004, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-20 are pending. Claims 1-20 have been rejected. Claims 1, 15 and 16 are independent claims from which claims 2-14 and 17-20 respectively depend. Claims 1, 4-9, 11-14, 16, 18 and 20 have been amended. No new matter has been added. Support for the amendments can be found in the application as originally filed on page 2, lines 4-25 and elsewhere in the application.

Confirmation of Acceptance of Formal Drawings

Applicant respectfully requests confirmation that formal drawings filed by Applicant on March 6, 2001 have been accepted.

§112 Rejections

Claims 1-20 have been rejected under 35 U.S.C. § 112 as being indefinite. Claims 1, 4, 5, 11, 13 and 16 have been amended to more clearly define the subject matter which Applicants regard as the invention. Applicants respectfully request the withdrawal of the § 112 rejections of these claims and of the claims which depend therefrom.

§102(b) Rejections

Claims 16-20 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Jones (U.S. Patent No. 6,003,061). Applicants' amended claim 16 recites:

> A system for scheduling future events comprising:
>
> a first data structure comprising a plurality of elements, each of the plurality of elements of the first data structure *associated with a period of time defined by a start time and an end time,* the plurality of elements of the first data structure comprising a first element associated with a first start time and a first end time and a second element associated with a second start time and a second end time;
>
> a second data structure associated with the first element, the second data structure for storing a plurality of event data for events to be executed between the first start time and the first end time; and
>
> a scheduling module which receives a first event data including a first event time at which a first event is to occur, and which *stores said first event data* in said second data structure, *said first event time being within said first start time and said first end time.*

(emphasis added).

Jones does not disclose or suggest at least the italicized features of Applicants' amended claim 1. Jones is directed to a resource management mechanism for arbitrating resource request and resource usage among application programs that run simultaneously. "The scheduling status data structure is comprised of three linked lists of thread data structures: a processor list 1501 containing one thread that presently being executed [*sic.*] on the processor; a blocked list 1503 containing the threads that are blocked on one or more resources; and a ready list 1502 containing any thread not on the processor list or the blocked list, i.e., any thread that is ready to execute but not currently executing." See Jones, column 22, lines 33-41. Hence, Jones does not disclose or suggest at least "a first data structure" where each of the elements of the first data structure is "associated with a period of time defined by a start time and an end time" and a second data structure for storing event data for events occurring "within said first start time and said first end time". Hence Applicants respectfully submit that claim 16 is allowable as are claims 17-20 that depend therefrom and request the withdrawal of the § 102 rejections of these claims.

§103(a) Rejections

Claims 1-15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Chalmer et al. (U.S. Patent No. 6,687,903) in view of Weber (U.S. Patent No. 5,781,769). Applicants' amended claim 1 recites:

> A method of scheduling a future event comprising:
>
> receiving a first event data including a first time at which a first event is to occur;
>
> creating a first data structure associated with said first event, said first data structure comprising a first element associated with a first start time and a first end time and a second element associated with a second start time and a second end time;
>
> associating said first event with said first element of said first data structure, said first time falling within said first start time and said first end time;
>
> receiving a second event data including a second time at which a second event is to occur, said second time not falling within said first start time and said second end time of said first data structure;

creating a second data structure for storing said second event data, said second data structure comprising a third element associated with a third start time and a third end time; and

associating said second event with said third element of said second data structure, said second time falling within said third start time and said third end time.

Applicants respectfully submit that Applicants' amended claim 1 is patentable because neither Chalmer nor Weber alone or in combination, disclose or suggest all the features of Applicants' amended claim 1.

Chalmer is directed to a mechanism for inhibiting process starvation in a multi-tasking operating system by providing a first type of event at periodic timer intervals and providing a second type of event when a running process relinquishes the processor. Chalmer "fails to explicitly teach creating the data structures". (See Official Action, page 5).

Weber is directed to using content addressable memory to process timed events. Events are stored in content addressable memory "which each contain an identifier field for a particular event to be processed at a later time and which also contain a time value field indicative of the time at which the event is to be processed." (See Weber, column 2, lines 12-15). Time values "are applied as inputs to the CAM. The CAM generates ...the event identifier field of any entries in the CAM for which the time value input is equal to the stored time value field." (See Weber, column 2, lines 19-22). Hence "[e]vents are "scheduled" by writing an entry to the CAM rather than adding an entry to a sorted queue." (See Weber, column 2, lines 35-37). "Similarly, events are found by...applying signals to the CAM rather than...searching for an entry in a queue data structure..." (See Weber, column 2, lines 37-40.) Hence Weber fails to disclose or suggest at least "creating a first data structure" including "a first element associated with a first start time and a first end time and a second element associated with a second start time and a second end time" as recited by Applicants' amended claim 1. Hence, Applicants respectfully submit that claims 1 and the claims that depend therefrom are allowable and request the withdrawal of the § 103 rejections of these claims. Claim 15 recites analogous features, hence Applicants respectfully submit that claim 15 is allowable and request the withdrawal of the § 103 rejections of this claim.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present Application is in condition for allowance. Withdrawal of the rejections of the claims and an early allowance is earnestly solicited.

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